

SAFETY SYSTEMS FOR POWER EQUIPMENT

Cross-Reference to Related Applications

3/4/05
③ 5 This application is a continuation of U.S. Patent Application Serial No. 10/215,929, filed August 9, 2002, which claims the benefit of and priority from U.S. Provisional Patent Application Serial No. 60/312,141, filed August 13, 2001. Both of the above applications are hereby incorporated by reference in their entirety for all purposes.

Background

Beginning with the industrial revolution and continuing to the present, mechanized
10 equipment has allowed workers to produce goods with greater speed and less effort than possible with manually-powered tools. Unfortunately, the power and high operating speeds of mechanized equipment creates a risk for those operating such machinery. Each year thousands of people are maimed or killed by accidents involving power equipment.

As might be expected, many systems have been developed to minimize the risk of
15 injury when using power equipment. Probably the most common safety feature is a guard that physically blocks an operator from making contact with dangerous components of machinery, such as belts, shafts or blades. In many cases, guards are effective to reduce the risk of injury, however, there are many instances where the nature of the operations to be performed precludes using a guard that completely blocks access to hazardous
20 machine parts.

Various systems have been proposed to prevent accidental injury where guards cannot effectively be employed. For instance, U.S. Patent Nos. 941,726, 2,978,084,